(19) World Intellectual Property Organization

International Bureau



1 (BB) 1 (B) 1 (B)

(43) International Publication Date 27 May 2004 (27.05.2004)

PCT

(10) International Publication Number WO 2004/043800 A3

(51) International Patent Classification⁷: 43/02, 17/16, B26F 1/18

B65D 17/28,

(21) International Application Number:

PCT/GB2003/004835

(22) International Filing Date:

10 November 2003 (10.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0226424.0

12 November 2002 (12.11.2002) GI

(71) Applicant (for all designated States except US): THER-MODYNAMIX THERMOFORMING SPECIALIST SERVICES LIMITED [GB/GB]; 3 Princes Park, Team Valley Trading Estate, Gateshead, Tyne & Wear NE11 0NF (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): REED, Harry

[GB/GB]; 11 Whickham Lodge Rise, Whickham, New-castle-upon-Tyne NE16 4RY (GB).

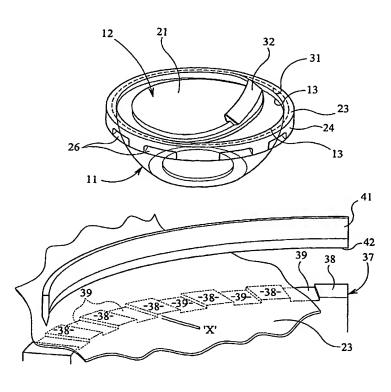
- (74) Agents: CARPENTER, David et al.; Marks & Clerk, Alpha Tower, Suffolk Street Queensway, Birmingham B1 1TT (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: TAMPER-EVIDENT CONTAINER



(57) Abstract: A container comprising a bowl (11), and a lid (12) for closing the bowl, the periphery of the bowl and the lid being arranged to be non-releasably interconnected, and, said lid or said bowl having a frangible boundary region (31) adjacent to its periphery, whereby at least a major portion of the lid (12) can be detached from the periphery of the container to open the container. There is also disclosed a method of producing a frangible boundary region (31) in a container lid (12), and an apparatus for performing the method, the method comprising supporting that region of the lid which is to contain the frangible boundary, on an anvil (37) the surface of which has a plurality of spaced recesses (39), and cutting said material by means of a blade (41) having a planar edge (42) parallel to the plane of the top surface of said anvil so that the blade cuts through the lid material completely where the lid material is supported on the anvil, and the material of the lid aligned with said recesses is flexed into said recesses by the blade, the depth of said recesses below the top surface of the anvil being less than the thickness of the lid material so that the lid material above said recesses is cut into and so thinned, but is not cut completely through, by said blade.

WO 2004/043800 A3 ||||||||||||||||||||||||



- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 26 August 2004
- (15) Information about Correction:
 Previous Correction:
 see PCT Gazette No. 30/2004 of 22 July 2004, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



INTERNATIONAL SEARCH REPORT A. CLASSIFICATION OF SUBJECT MATTER
1PC 7 B65D17/28 B65D43/02 B65D17/16 B26F1/18 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) B65D B26F B26D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category * Relevant to daim No. X WO 95/06600 A (PROCTER AND GAMBLE) 1-8. 9 March 1995 (1995-03-09) 11 - 13.18page 5, line 5 - page 7, line 38; figures X EP 1 160 171 A (DOLPHIN PACKAGING) 1-8,11,5 December 2001 (2001-12-05) 18 column 5, line 45 - column 6, line 13; figures 8-13 X EP 0 055 007 A (NIGU-PACK) 1-3,8, 30 June 1982 (1982-06-30) 11,18 page 5, line 12 - page 9, line 27; figures Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the International "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the International filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the International search report 28. 06. 2004 4 June 2004 Name and mailing address of the ISA

Authorized officer

Rabolini, M

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

INTERNATIONAL SEARCH REPORT

I itional Application No PC I / GB 03/04835

	INTERNATIONAL SEARCH REPORT	KC1/GB 03	/04835
C.(Continue	ition) DOCUMENTS CONSIDERED TO BE RELEVANT		1
Category °	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
X .	DE 86 13 634 U (PIBER GROUP) 3 July 1986 (1986-07-03) page 2, line 18 - page 4, line 32; figures 1-6		1-3,8, 11,18
X	US 4 702 387 A (WOMBOLD) 27 October 1987 (1987-10-27) column 3, line 36 - column 4, line 54; figures 1-5		1-3,8,18
A	EP 1 013 562 A (SHEPPARD) 28 June 2000 (2000-06-28)		
A	EP 0 875 370 A (SHOWA DENKO PRODUCTS) 4 November 1998 (1998-11-04)	٠	
Ą	FR 2 395 200 A (SNBP) 19 January 1979 (1979-01-19)		
A	US 5 809 860 A (HAASER JAMES DUDLEY) 22 September 1998 (1998-09-22) figures 7,8		19,22
·			
		·	



INTERNATIONAL SEARCH REPORT

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)						
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:						
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:						
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:						
3: Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).						
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)						
This International Searching Authority found multiple inventions in this international application, as follows:						
see additional sheet						
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.						
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.						
3. As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:						
4. No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:						
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.						

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ GB 03 /04835

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18

Container comprising a bowl and a lid, whereby their peripheries are non-releasably interconnected and whereby a major part of the lid can be detached from the periphery of the container.

2. claims: 19-23

Method of producing a frangible region in a container and apparatus therefor.



PCT/GB 03/04835

Patent document- cited in search report	Publication date		Patent family member(s)	Publication .
WO 9506600 /		AU		date
WO 9500000 /	4 03-03-1333	CA	7601794 A 2170590 A1	22-03-1995
		WO	9506600 A1	09-03-1995 09-03-1995
		ÜŠ	5511680 A	30-04-1996
				30 04 1330
EP 1160171 . #	05-12-2001	AU	4803801 A	29-11-2001
		CA	2348339 A1	26-11-2001
	•	EP NZ	1160171 A2	05-12-2001
		NZ US	511879 A 2002003142 A1	28-02-2003
		GB	2363114 A	10-01-2002
				12-12-2001
EP 0055007	30-06-1982	DK	549180 A	24-06-1982
•		AT	20719 T	15-08-1986
	•	AU	547413 B2	17-10-1985
		AU	7933282 A	20-07-1982
		BR	8108929 A	30-11-1982
		DE	3174946 D1	21-08-1986
		DE	8138577 U1	05-04-1984
•		MO	8202183 A1	08-07-1982
		EP	0055007 A1	30-06-1982
	•	FI	822846 A	16-08-1982
		JP NO	57502118 T	02-12-1982
		NZ NZ	822844 A 199345 A	20-08-1982
		US	4453646 A	13-12-1985 12-06-1984
		ZA	8108796 A	24-11-1982
				24-11-1902
DE 8613634 L	03-07-1986	IT	. 207083 Z2	23-11-1987
		DE	8613634 U1	03-07-1986
US 4702387 A	27-10-1987	NONE		
EP 1013562 A	28-06-2000	EP	1013562 A2	28-06-2000
EP 0875370 A	04-11-1998	JP	1020E071 A	17 11 1000
=. 00/30/0 P	04-11-1320	AT	10305871 A 207009 T	17-11-1998 15-11-2001
		DE	69802032 D1	22-11-2001 22-11-2001
		DE	69802032 T2	06-06-2002
		ĒΡ	0875370 A2	04-11-1998
FR 2395200 A	19-01-1979	FR	2395200 A1	19-01-1979
US 5809860 A	22-09-1998	AT	187945 T	15 01 2000
	LL 05 1530	ΑÚ	3614495 A	15-01-2000 06-05-1996
		CA	2202492 A1	25-04-1996
		CN	1160385 A ,B	24-09-1997
		DE	69514114 D1	27-01-2000
	•	DE	69514114 T2	20-04-2000
			0784575 A1	
		EP .	U/043/3 Al	25-0/-199/
		EP . ES	2139940 T3	23-07-1997 16-02-2000
				23-07-1997 16-02-2000 25-04-1996